THE FARMER & GARDENER

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, E. P. ROBERTS AND SAMUEL SANDS—EDITED BY E. P. ROBERTS.

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TUESDAY, BALTIMORE: DECEMBER 26, 1837

CHRISTMAS—Our readers will receive our best respects and the compliments of the season.

As most of the legislative bodies of our country are now in session, it is to be hoped that each and all of them will do something to promote the interests of agriculture; and should no movements be speedily made voluntarily, we trust the agriculturists of the several states will approach their respective legislatures in memorials, setting forth their wants, and asking such aid as may be required.

THE HOLLOW HORN—We would again remind our readers that this disease may be prevented if the following precautionary plan be adopted and adhered to:

Once a fortnight put a teaspoonful of spirits of turpentine in the *cavity* or *cup* just behind the horns of *neat* cattle.

LARGE CROPS OF CORN.

(From Kent Bugle.)

MR. EDITOR,—For the encouragement of the agriculturists of Kent county, you will confer a favor by giving the following statement in your very useful paper. There was raised by the subscriber, in Chestertown, on a small piece of ground, 99 by 45 feet, 4 barrels of corn, which would be at the rate of 195½ bushels to the acre. I planted it on the double drill system. The drill is two feet apart with three stalks in a hill; it must be worked early, and plastered at six inches high. If the land be strong, well prepared and cultivated as farmers ought to cultivate their crop, they would be sure to realize a full crop. Quere,—if so much ground can be made to produce 4 barrels of corn, why not a larger portion? All the farmer has to do is to make his land rich, and a few acres will bring him more than a large farm. Let any man in Kent beat this.

SAMUEL L. RAWLEIGH.

We understand that Mr. *John Ridgely*, of Hampton, raised off a lot of 5 acres at the rate of 19 bbls., or 95 bushels to the acre.

Mr. *Henry Schwartz*, who resides a few miles from Baltimore, on the Frederick road, raised on a field of 25 acres, at the rate of 75 bushels to the acre.

Such results as these should encourage our brethren of the plough to persevere in their exertions, to *manure and tend well* whatever corn they may put in. It is certain that by a rigid adherence to these particulars much greater crops of corn can be grown than our agriculturists have been used to. In the more exhausted parts of Maryland, we have been assured that crops do not average more than from 2 to 4 barrels to the acre. How much better would it be were those whose misfortune it is to have such poor land, to put in but one-half the quantity they usually cultivate, and give to *that* a double portion of manure and labor, than to be killing their beasts and hands in fruitless endeavors to raise corn from lands whose heart's blood have been long since extracted.

DISEASES OF SHEEP.

The diseases of this most useful animal are but little attended to; numbers die that might be saved by medicine, if shepherds knew what was proper to give them.

Foot-rot is a most troublesome and difficult disease to cure. Put the sheep in a dry fold; clear the dirt from between her claws with an old tooth brush; apply to the parts affected, with a wooden skewer or feather, butter of antimony, and let the sheep remain an hour in the fold. Or, apply a paste, made of equal quantities of blue vitrol, gunpowder and train oil.

Scab.—The most effectual remedy is the mercurial ointment, to be had ready made at all druggists; which is also good for sore heads, caused by the fly, or for maggots.

Gurry.—One small tea spoonful of turpentine, and four table spoonsful of salt and water—one does is often sufficient. Or, Peruvian bark, ginger-root, and prepared chalk—one drachm—in warm gruel, with a table spoonful of gin or brandy. If a severe case, a tea spoonful of tincture of opium.

If a sheep that is fat, or nearly so, appears to be off from its food, for some days, from some internal complaint, the safest plan is to have it killed.

Scouring of young Lambs.—Ginger and rhubarb, one tea-spoonful, in warm gruel, with ten drops of laudanum. Fourteen tea-spoonsful of rhubarb, seven of ginger, and seven of laudanum, or tincture of opium, will dose a score of lambs, about three quarters of a year old. Many flocks of lambs having been kept very short of food during the late dry summer, numbers have died from eating the young succulent grass which sprung up when the rain came.

Ewes injured in Lambing.—Apply to the parts warm water, and after, warm fresh grease; and then outside, some known good oils; give a drachm of Peruvian bark and ginger in gruel, new milk, warm, made of linseed and oatmeal; add a table-spoonful of gin or brandy, and treacle.

To prevent the Fly.—A powder, composed of white lead and wine arsenic, to be shaken on with an old pepper box; it is to be had ready prepared of any druggist.

The most fatal disease is the rot, which is thought to be incurable; but I know from experience, that the progress of the disease may be so checked, that the animal will get fat enough for the butcher. There are various opinions as to the way in which this disease is contracted. I have ever thought it has been by the sheep eating in summer, or autumn, the grass of flooded meadows, or swampy pastures, on which some sort of grub had deposited its larvæ, which are not destroyed by the heat of the stomach, but mixing with the chyle, find their way into the vessels of the liver, where they become what are commonly called flukes, from their resemblance in shape, to flounders; where they absorb the chief nourishment of the blood of the animal, and then, in a short time cause its death. It may fairly be asked, how is it that beasts eating the same grass are not affected by it? The reason probably is, that the digestion of an ox or cow is so much stronger, that the larvæ are destroyed, and carried away with the food.

An eminent surgeon has informed me that there is no communication with the stomach and the liver, but as he cannot in any way account for the flukes getting into the liver, I do not give up my opinion. I am strengthened, too, in my belief, from its being well known, that after a frost of forty-eight hours, or less, sheep may safely be kept in a pasture, which, had they been put in before the frost (even for one day,) would certainly in the course of two or three weeks, be found to have flukes in their liver, but which is prevented by the frost destroying the larvæ on the grass. I am quite aware that many other scientific objections may fairly be made against my idea; such as that the worm or grub, a cold-blooded creature, intended to live in common atmospheric air, could not exist in the inside of any animal. Bots, so common in horses laying out at grass, it is well known, are produced from the horses biting each other, in kind fellowship, about their manes, where some sort of fly or moth had deposited their eggs or nits, which the horses thus get into their mouths and stomachs, where they become bots, and make their appearance in the horses' fundaments. It cannot be supposed that instinct points to the moth or fly to leave its eggs there for the purpose of its getting into the horse's stomach;

it appears to me that it probably only leaves it on that part from finding a saliva there from the playful biting of another horse. Hearing a farmer complain, in the year 1814 of the great loss he had sustained by the rot in his sheep, I recommended him to try Armitage's remedy; he had no faith in any of the nostrums; it was, however, agreed between us, that as I was going to London the next day, I should bring a sufficient quantity for a score of sheep, which he was to take on return, or sell me a score of sheep for ten pounds. He sent me the sheep. Our farms were divided only by a small brook, but the sheep having to walk a mile to get to my farm, two of them died in that mile. I dosed the eighteen according to directions. Sixteen soon seemed more lively for it; to the two that did not, I gave the medicine I had to spare, which proved to be over-dosing them, and consequently killed them. Thirteen of the others I made fat in the summer, sent them to London, and made about forty-seven shillings a head. One proved what is here called a rubber, which no feeding will make fat; one was drowned.

To see what sort of mutton the best was, I had one killed and consumed (all but one leg which I sent to the farmer,) in my own family, who knew nothing of the circumstance attending it, and therefore found no fault with the meat; but some one, I recollect, commended some joint as being very tender. The farmer could scarcely believe that the leg of mutton I sent him could have come off one of the poor miserable animals that he sold me. For my own part, I confess I could not relish the mutton, although I felt sure there could be nothing unwholesome in it. The difference between that and the other mutton is, the lean is more tender and less flavored; the fat is whiter, and the gravy lighter colored. The farmer informed me afterwards of one circumstance which was important. He said he understood I was to have forty of his sheep, and therefore he drew forty of the worst of his flock, and marked them for me; that the next day, not liking to part with so many at so poor a price, he turned back into his flock twenty of the best of them with the mark on, and every one of those twenty died. A few years ago, I made several inquiries after the medicine, and could hear nothing of it, but found that Armitage was dead. No medicine can make sound a liver that is in part rotten; but it can so stop the progress of this disease by killing the flukes, as to allow the sheep, with a summer's feeding, to get remarkably fat. The chief ingredient in all the medicines must be oil of turpentine.—*Hillyard's Practical Farming (an English work.)*

(From the Franklin Farmer.)

BEE-MOTH AND BEE-MANAGEMENT.

Mr. Editor—According to promise, I will pursue this subject, with some apprehension lest your editorial note may have induced the belief that I was about to divulge some mysterious and sovereign specific, for the destruction of these hateful insects. So far from it, the plan which I at present pursue, is exceedingly simple, and susceptible of universal application; and may not have been practiced by me alone, or by me first. But as I tried many unsuccessful experiments, and lost many valuable bee stands, before I adopted this plan; and as it has been quite satisfactory thus far, and it is not generally practiced, I cannot refuse to communicate it, according to your request.

A shed should be built with three sides closed tight, and with the other side open to the east, high enough, under the eve, to admit two bee-benches, one above the other, and broad enough to walk freely behind the stands, with a door in one end of the shed for persons to enter it. The boxes should be arranged upon these benches with their entrances outward, so that the bees will be under no temptation or inducement to come behind them.

The boxes should be 20 inches square in the clear, made of thick seasoned plank well put together, with tight joints. The bottom of the box, which sits upon the bench, should be bevelled, from the outside, to a sharp edge. Cross sticks should be put in the box, and notches made for the bees to enter, in the usual manner: and large holes should be bored in the top of the box, to be covered with a cap twelve inches square, bevelled as above, after the box shall be well filled.

When the bees begin to work in the spring, the boxes must all be raised upon the blocks put under the corners, high enough to permit the bees to pass freely under them; but not high enough to admit mice. The blocks must be high enough for the box to sit upon them without rocking or slipping. A light, slim, wooden paddle should be made, with a handle about 18 inches in length, and with a short, thin, elastic blade, and should be kept always in the bee-house. With this instrument in hand, the bee-master must walk behind the benches, and tilt the boxes over from him, look into them and search for and destroy with the paddle, any flies or maggots which may be found. The house being open only in the front, and the bees being accustomed to fly out only on that side, this operation may be performed with security and at leisure. Indeed it will be a pleasant place, which may be resorted to at any time day or night; and the bee manager, whether male or female, so far from finding it an unpleasant or perilous task, will find it an agreeable and profitable amusement, and will be so much interested with the bees as to visit them too often for the moths to make much progress before they are discovered and destroyed.

If you wish to take some honey, a cap may be removed at any time, an empty one put on the box, and you may retreat through the side door, without the least inconvenience to yourself or interruption to the other bees.

The blocks not only serve to prevent a lodging place for the maggots, but also prevent the bees from being mashed when the box is set down, after being inspected. Nails have been recommended instead of blocks, but the difficulty of inserting and removing them renders them objectionable.

There is no effectual virtue in the nails, or in the blocks, or in the manner or material for making the boxes; or in drugs or liquids to drive the moths from the hive. *The boxes must be raised up, and inspected frequently and carefully, and the moths and maggots killed with the paddle.* This will give but little trouble and much pleasure and profit too, if the bee house is constructed on this plan, and is conveniently situated, so that the bee master can often step in and spend a leisure moment in witnessing and assisting the labors of these his industrious and unhired servants.

For this sort of attention my bees have this year repaid me with over two hundred pounds of delicious honey, and with new swarms. 'Tis true I have had to inspect them often and kill many moths; and have lost two stands by depending upon the blocks and boxes too much, and not using the paddle enough.

Your friend, R. W. S.

SHAKER PIG-STYE.

"The pig-stye at Canterbury, is well worth a visit for the neatness, yes, the neatness of a pig-stye! and the admirable and happy condition of its tenants. Twenty or thirty swine in clean swept styes, whose average weight at killing time will be between four and five hundred pounds, is a sight which Parson Trullive would have looked upon with ecstacy. The whole care of the swine in one building devolves upon one man, whose feeding tubs, and pails, and dippers, and cloths, were as neatly arranged as in any lady's kitchen. The troughs are so arranged that the pigs are shut away from them while filling; of course there is no interference or squealing from the hungry expectants. The food given them is always cooked, and the Shakers consider a portion of rye mixed with the corn as very much improving their food. Their experience leads them to the conclusion that it would be better to buy rye at a quarter of a dollar more a bushel than corn, to mix with corn in equal parts, than to give their swine Indian meal alone."

[This extract, which we find copied from Mr. Colman's letters, while it shows the value of neatness in fattening pork, and the importance of cooked and mixed food, reminds us of a remark made by a farmer remarkable for the weight and quality of his pork. He said he also mixed oats in the proportion of one-third with his corn for grinding, and his experience had taught him that he had better pay the price of corn for his oats, than to feed corn without them; and if success be a test of correctness in farming, he was right. —*Gen. Farmer.*]

SHAKER BARN.

The English agricultural journals are warmly praising a mode of curing hay by ventilating the stacks or mows, and thus preventing mold or must; it will be seen by the following extract from the same writer's papers, than ventilation is no new thing among the shakers.—*ib.*

"The great object of agricultural curiosity at Hancock, is their magnificent circular stone barn, two stories in height, and ninety-six feet in diameter. The great mow is in the centre, and is said to be capable of containing four hundred tons of hay. The door, or drive way, is on the outside of the circle, and the team goes round and comes out of the same door by which it enters. By all passing in the same direction, several teams can stand on the floor and be unloaded at the same time. In the centre of this mow a large mast or post is erected, reaching from the ground to the roof, which is crowned with a small cupola. Slats, or pieces of plank, are secured around this post at a small distance from it, to prevent the hay from coming in contact with it, and the hay at the bottom being raised from the ground, a perfect ventilation is kept up, and the steam from the new hay is effectually carried off."

TRANSMUTATION OF GRAIN.

But for the sanguineness of some of the readers of the Monthly Farmer, in the belief that wheat and other grains will turn to chess, I should not intrude this communication into public notice. If they could read the former volumes of the Genesee Farmer, I think they would be convinced of the absurdity of the notion. There experiments are recorded, experiments conducted scientifically and minutely in every detail, to test the controversy; and could those who believe in the doctrine of transmutation have the privilege of perusing these statements, it would tend greatly to disarm them of the discordant views they entertain of vegetable physiology, and lead them to investigate the subject, and draw different conclusions. But the practicability of this is deemed doubtful for many of the readers of the Monthly. Hence a few facts and considerations are respectfully submitted.

In the first place, the laws of Nature are eternal and unchangeable. Now in all the operations of nature we observe certain fixed and invariable principles which are never violated. To give countenance to the doctrine of the mutability of wheat, must suppose an innovation and perversion of the established laws of nature, which from time immemorial have through all the mighty system of the universe in operations, great and small, stood firm as the pillars of heaven. Some have said that it is no more extraordinary for wheat to turn to chess than for sweet to turn to sour, or cider to vinegar. There is no analogy in the process by which sweet turns to sour, and that which by possibility wheat could be turned to chess. The one is decomposition and re-combination—the result of fermentation, effected by the operations of the elements upon an organized substance. The other "is a regularly organized body only in a limited degree subject to these laws of the external kind, obeying certain fixed and arbitrary laws engrafted within the very tissue of its existence; and it is the very business of these laws in organized bodies, not only to preserve them from destruction by the deterioration of time and the elements, but also from transmutation, change or degeneracy." If then these laws which have regulated the propagation, and preserved so identically the specific peculiarities of all organized existences, from the earliest time down to the present day, and which will continue the same to the remotest age of time, how can it be supposed that one genus or class of plants will turn into another? Inconsistency of thought! And to which laws the Creator has given such instinctive characteristics, in preserving order and harmony in the most beautiful and useful portion of creation. Can it be thought with propriety that they are now less capable of fulfilling that office than at first?

2nd. We have the authority of the sacred writings against the doctrine of transmutation.—In the creation of the animal and vegetable kingdom, God formed each individual species after its kind as is declared in Genesis: "God made the beasts of the earth after his kind; and cattle after their kind, and every thing that creepeth after their kind." Every order of creatures was formed in such a manner that they should ever continue to propagate its kind and no other. This law, which the great Author of Nature impressed upon his works, has even, and will ever continue immutable in the animal kingdom. It is utterly impossible for one species of animals to produce another and entire different species; and where there have been strange and unnatural mixtures, the established laws of nature have rendered the offspring incapable of procreation. Now the scriptures are equally pointed, and precisely the same style of language is used, when speaking of the creation of the vegetable kingdom, as of the animal kingdom; which shews that the same impassible barriers are interposed between the different genera and speices of vegetables to keep them separate; that they are subjected to the same unalterable laws; and that it is equally as impossible for one genus of plants or grain to produce another, as for one kind of animals to produce another entire and different species. "And the earth brought forth grass and herbs, yielding seed after his kind, and the tree yielding fruit whose seed was in itself after his kind. And God saw that it was good." Do these words mean any thing, "yielding seed and fruit after his kind," each after its own and not after another? Grass yielding grass, wheat yielding wheat, and chess yielding chess. If so, how has it come to pass that the plant which yields to man the "staff of life" has ceased in any instance "to yield seed after his kind," but instead of it a worthless grain scarce fit for cattle to eat? Consider this, ye advocates of transmutation! and see that your belief does not charge the Almighty with inefficiency of organization. For to suppose that wheat will degenerate into chess would be to impeach the wisdom of the Creator, when he framed it for man, and his veracity when he pronounced of the work of his hands "that it was good." One more passage and I shall be done with scripture testimony: "That which ye sow ye shall also reap." Who supposes that the evidence of the adaptation of this truth to the present time, is not as great as it was some centuries since when it was uttered by the Apostle. None but those who contend for a theory, they cannot rationally support by any plausible argument. When defeated in argument, they generally resort to the subterfuge, that "as our fathers believed so do we." But how will the belief in the mutability of grain compare with the above quotations? Are not the scriptures infallible? I am of opinion, and my opinion is not only supported by the inspired writings, but by the philosophy of nature, that if pure wheat is sown on land free from filth, pure wheat will be the result; and if we sow chess, such we shall reap.

3rd. The doctrine in question is unreasonable. Shall we set aside reason for an assertion, which if true would unsettle a fundamental law of nature? It is an invariable law of nature for every kind to produce its like. It is a law of His creation, an inviolable principle in nature that "like shall produce like." If we admit that different kinds of grain will produce a different species, where would be the limit to such an idea?—The mind habituated to close reasoning, is lost in conjecture. Surely if this peculiar change takes place in one class of vegetables, it must in others; for say they, disease is the cause of change, and many, if not all vegetables, are subject to disease. O the result of such a theory! Confusion and disorder would pervade the universe, and nature would present one chaotic scene!—Vegetables when they happen to be winter-killed or diseased changed into something else! O blind infatuation! When will the sons of this enlightened land learn from reason and experience the absurdity of such an hypothesis! But enough.

I have extended this communication to greater length than I anticipated, but I will state, that from one kernel of chess, I raised in my garden this year, 3,600 kernels! of pure chess. There were 36 stalks, and they averaged 100 kernels on each. When wheat is winter-killed, if there is any chess in it, it extends its branches and roots, and occupies the place of the wheat.—Hence the more chess where wheat has been destroyed; chess being more hardy, it is not so easy of destruction. Is not this a more rational way to account for the appearance of chess among our wheat than ascribing it to the theory of transmutation.

R. H. SHELDON.

Brutus, Oct. 11th, 1837.

THEORY OF AGRICULTURE.

The theory of agriculture, which we lay down, is built upon the following fundamental principles; and with one or other of them every part part of rural practice is more or less connected. *First*, that the soil ought to be kept dry; or, in other words, free of all superfluous moisture. *Secondly*, that it ought to be kept clean; or, in other words, free of noxious weeds. *Thirdly*, that it ought to be kept rich; that is, that every particle of manure, which can be collected, ought to be applied, so that the soil may be kept in a state of yielding good crops. Every person possessed of a sufficient capital stock, may act according to the first and second principles; but it is only where local circumstances are favorable, that the last can be carried into effect. No more, however, being required of the farmer, than that he shall make the most of his situation, the principle applies equally to all; and, in like manner, is equally correct and beneficial in all its situations and circumstances.

Holding these principles in view, and assuming them as the basis of what is meant to be inculcated, we proceed to illustrate them in a more particular manner.

In the first place the utility, nay, the necessity of keeping the land dry, and preserving it from being inundated or flooded with water, is so obvious, that few arguments will be required in support of this primary principle. When land is allowed to remain in a state of wetness, which may be occasioned by sprouts, or springs, in the under-soil, or by rain-water stagnating on the surface, the earth gets into a sour state, which afterwards is detrimental to the growth of plants; and often, in the first instance, prevents either ploughing or harrowing from being successfully effected. Under such circumstances, the young plants, either corn or grass, get yellow or sickly, and never assume that vigorous, thriving aspect, which they maintain upon fields differently circumstanced.—Besides, manure has not the same effect when the earth is drowned, or even injured with wetness, as when it is dry and free from superfluous moisture. Under-draining is the only method of erecting the evils arising from sprouts, or springs as will be afterwards more distinctly stated, digging out the head-land, and what are pro-

ally called *gun-furrows*, the only preventive against surface-water, when heavy falls of rain ensue. In fact, without attention to these important operations, arable land can neither be perfectly managed or full crops reaped from it. Perhaps the goodness or badness of farm management may be as correctly estimated by the attention shown to drainage, as by any mark whatever.—Where drainage is neglected, a sure proof is furnished, that many other branches of the art are imperfectly executed. Unless this branch of rural economy is assiduously attended to, the advantages arising from ploughing and manuring are only partially obtained.

In the second place, the benefit arising from keeping the land clean, is sufficiently discernible. Weeds, whether of the annual or the perennial sorts, may be regarded as preferable creditors of the soil, who will reap the first advantage of manure, if allowed to remain in possession; their removal, therefore, forms an important object of the husbandman's attention. Without detailing in this place, the most suitable means of removing them, it may be stated, that according to the degree of success that follows the means employed, so will the goodness or badness of the husbandman's crops be regulated. If the strength, or nutritive powers of the soil be exhausted or drawn forth by weeds, or such plants as the soil naturally produces, it is impossible that artificial plants can prosper. It rarely happens, to be sure, that the aborigines are altogether extirpated; but upon the smallness of their number depends the returns which the soil can make to man, for the labor bestowed upon its cultivation.

In the third place, the necessity of restoring to the soil in the shape of manure, the powers drawn from it by artificial crops is acknowledged by almost every person. No doubt some heretical opinions have, at different times, been broached, concerning the utility of feeding land by generous manures: but these never had many votaries, and are now becoming so obsolete, that it would only be a waste of time to notice them. Manure in fact, is the most powerful agent in the hands of the farmer, and the attention bestowed upon collecting, preparing and applying it, constitutes an important branch of the art which he practices. Perhaps agriculturists are more behind, in the points connected with this third general principle than in others; and here, the utility of chemical knowledge may, in some respects, be estimated and recognized.

These three fundamental principles hang or fall together. Without laying land dry, neither the advantages of good ploughing, nor the benefits arising from manure, can be fully obtained. When any of the other principles are neglected similar effects will necessarily ensue. But when they are all acted upon; when the land is kept dry, clean and in good order, the husbandman may expect a suitable reward for the trouble and expense bestowed on its cultivation. An agricultural code of this kind is not only a true one, but has the particular merit of being simple and distinct; nay it has an advantage which few creeds possess; it may be understood by the dullest capacity. Were it carried into execution; were the operations of farmers regulated by its tenets, were their endeavours constantly directed to keep the lands in their possession dry and clean, and as rich as possible, then the country would be progressively improved. In a word, these are the fundamental principles of agriculture, though several other things, such as a rotation of crops and the like, may be regarded as minor or inferior ones. All of them, however, are dependent upon the principles already noticed; because, were the fundamental principles rejected, the minor or inferior ones, could never be successfully carried into execution.

[From the Franklin Farmer.]

We thank the writer for the following; and as he offers the benefit of his knowledge and experience to any others disposed to engage in the culture of silk, we hope he will continue his communications. The statement of his own operations, as far as it goes, is encouraging to others; and if he will furnish facts applicable to this pursuit in Kentucky, he will thus render it an important service. There are many others who have made a good beginning in this new and promising branch of industry, and we hope they too, will contribute information calculated to promote the success of the business. We will gladly publish communications on the subject, showing the success of those employed in his enterprise or offering facts for the use of those who wish to do so.

PARL PLACE, NEAR BRANDENBURG, MEADE CO. KY., November 27, 1837.

Mr. Editor—Sir—Although I have not had the pleasure of examining a number of the "Franklin Farmer," I have seen it spoken of in the highest terms by the "Cultivator" and "Silk Culturist," and am highly gratified to learn that such a publication has been established in Kentucky—a State in which I think there is a wide field for agricultural improvement; and it only remains for our farmers to read, with a view to profit by *what they read*, to rank with the first agricultural districts of the world.

There is one branch of national industry which I think it would be well to recommend to the people of this and some of the adjoining states, viz: that of the cultivation of the mulberry and the rearing the Silk-worm.

Under the impression that this State possessed advantages, both as to soil and climate, over many others of the Union for this business, I removed from the state of New York about twelve months since, with a view of establishing it here, and from the result of my experiments the last season, my expectations are more than realized.

On the 18th of April last, I *laid down* about 1,000 plants of the morus multicaulis, the produce of which is now more than 6,000, measuring from 5 to 8 feet high. I took at one time from the shoots from one tree—laid down, root and branch—9 lb. 4 oz. of leaves, some of which measured 14 by 15 inches.

I fed a few thousand silk worms the last season, the cocoons of which were of uncommon size, and equal in quality to those of any other country.

I am now erecting a cocoonery and shall extend the business as fast as circumstances will permit. Wishing not only to advance my own interest but that of my country also, I hope I shall not be long alone in this section of it engaged in this great enterprise, and, any information I may possess on the subject, will be freely given to those wishing to embark in the business.

It is gratifying to the friends of the silk enterprise to see that the Legislatures of several of the states have already offered liberal bounties for its encouragement, which, in a public point of light, its importance demands, and will Kentucky be less liberal should the subject be brought before her legislature at the coming session.

I am, sir, yours respectfully,

H. P. BYRAM.

[From the Farmers' Cabinet.]

BEET SUGAR.

MR. EDITOR:—I am not quite sure that beet sugar is profitable to be made (i. e. in strict accordance with the principles of political economy,) on a small scale: it is, in manufactories, to be conducted on a large scale. We predict, that it is to become a national branch of industry and produce, but this cannot be any hindrance or objection to the farmer's employing his leasure hours during the winter season, to the production of sugar for his own use, or, eventually, when it shall have become better understood, for the refineries.

For this reason I shall confine my present hints and observations to the producing of sugar on a small scale, with simple means and at small cost, particularly as there are so many throughout the country who have grown the beet root, and will, at all events, be desirous of making an essay at beet root sugar making; also, convinced as I am, that from among the number, must proceed that experience which is to become the basis of large establishments throughout the United States are many years pass over. From all that has been done in the United States towards making beet sugar, little has resulted, as yet, but much could already be written on the subject that would be useful as a guide to others. This task I cannot assume, though deeply interested; therefore, I can only promise to describe how beet root sugar *can be* made.

PREPARATIONS FOR MAKING THE SUGAR.

The articles required for the most simple and ready mode of manipulating are:

1. A rasp for reducing the roots to pulp.
2. A defecating pan.
3. A filterer.
4. A boiling pan, similar to No. 2.
5. A cooling pan.

Skimmer, cloths, clais (or wicker frame work,) tub or tubs, and a variety of other small articles which will be required or not, just in proportion to the scale on which it is conducted. Such as will be required simply for *making sugar*, shall be described as we proceed.

The rasp being the first important implement, we will describe such a one as can be easily made, viz: a wooden frame, such as used for a grindstone. A circular piece of wood to form the barrel of the rasp, say one foot in length and the same size in diameter, or larger if you please, (the heavier the better.) Pass an axle through this piece of wood, and set it to the frame precisely as a grindstone, to be turned by a crank or pedal. Around the barrel or circular wood, nail on sheets of tin, perforated in the manner of a bread grater.

To the end of the frame towards which the circular barrel is to revolve, affix a small trough, or box, say nine inches wide by eighteen inches in length; inside of this box is to slide a block, which can be drawn up and pressed down with one hand, whilst the other hand is engaged in putting roots into the box through an opening on the top. The roots to be pressed against the tin grater as it revolves, and thus they will be torn into an impalpable pulp and fall into a tub or box placed under the rasp. After a person has once witnessed the producing of the juice from the root by a proper sort of rasp upon this principle, it will need no argument to satisfy him that the roots can be torn apart in every fibre and reduced to a pulp, by no other contrivance so effectually as the French rasp, which makes nine hundred revolutions per minute, when propelled by steam.

Let us now suppose we are about to make some beet root sugar.

1st. Clean the dirt from the roots by washing, or shaking well one against the other; the latter suffices here, as they come up very clean.

2d. Trim off with a knife the fibrous tape root and *all the crown* of the root, to get rid of all acrid substance.

3d. Rasp them as before described, and thus you obtain your pulp.

4th. Have ready a small frame of four pieces of strip, formed into a square, with its centre about nine by twelve, for light pressure. Lay this frame on a board, which board slants into or towards the tub in which is your pulp. On this frame, then place a piece of coarse linen crash or cloth, five times the size of the centre of the frame, and in the centre of the cloth—which of course will be the inside or centre of the frame—lay a shovel full of pulp, then folding the cloth up from the four sides, you have the pulp, enclosed as it were, in a square flat bag, which will yield under any pressure without bursting, and still retain safely the pulp.

5th. Press your pulp to obtain the juice. This is to be done under any sort of press or pressure that you may choose; the amount of juice obtained will be, of course, according to the amount of pressure; eighty-five per cent. of juice *can* be obtained from the root. A very simple plan for an experiment, is, to place the pulp in a long piece of cloth, spreading the pulp about six inches and roll the cloth up, making it four feet long, and wring out the juice by hand, aided by a stick in the centre, doubling the cloth and making fast both ends. If you have a press, place on the bed of it, a zinc, tin, or copper pan, larger than the square bags or wickers, (which latter we shall soon describe,) in order that it may not be injured by the pressure. The sides of this pan need not be over two inches in height. In the centre front of the pan, should be a break or spout for the juice to flow out into a tub beneath. This arranged, place a cloth filled with pulp on the pan under the press—on this cloth or bag of pulp, place a *clais* or piece of wicker work, similar to the top of a champagne wine basket, or ordinary wicker basket work, made square and flat. This wicker work is to prevent the pulp in the bags from clogging and bursting under the pressure, and to make juice flow easily and obtain the more of it from the pulp than you otherwise could. On top of the wicker place another bag of pulp, then another wicker, then another bag of pulp, and so continue until your press is filled, when, by applying the presure, you obtain the juice which flows into the tub under the press.

All being previously in readiness, not a moment should be lost after the juice is obtained, but hasten it into the defecating pan, which is placed over a naked fire, and may be an ordinary copper wash kettle, and proceed to

6th. Defecate the juice.

The juice is now in the kettle over the fire. Keep up a brisk fire until the juice is heated to 150° Fahrenheit, or so hot that you can but place your finger into it without burning it. At this moment is the lime to be added, i. e. having ready some cream of lime, prepared by slacking a piece of pure clean lime *in hot water*, reduced to the consistence of cream; add to your juice at this point of heat, not more than one ounce in proportion to eight gallons of juice; this is, however, to be known better by experience and the state your roots are in. On such points as this, is your judgment to be carefully exercised. You must stir the lime thoroughly to mix it with the juice, and when you shall have done so, increase your fire, and continue your juice over it until it attains the boiling point, when your fire must be instantly checked or the boiler or kettle as instantly removed from off the fire, and the juice left for perhaps half an hour, or until it has become perfectly clear, and the deposit made in the bottom; then with a skimmer remove the black scum from the surface, and pour off the juice carefully into another pan, boiler or kettle, to be evaporated. If the juice has now, or previously assumed a dirty appearance, be not discouraged in your first effort; this is always the appearance of it until it changes to molasses.

7th. *Filtering* has not been recommended at this point, but I think it should be done. I will, therefore, describe the manner in which I performed it—to be referred to again—and leave those who essay to make sugar, to filter once only, or twice, as they may deem best. A box of a size proportioned to the scale on which you are working, (unless on a very large scale—in which latter case you will need many filterers, and of the usual size used in manufactories.) I used a flower pot of the capacity of two gallons, as having a hole in the bottom, being conical and of earthenware and readily obtained, it was most convenient and answered the purpose. Prepare a circular piece of wood to fit inside the conical box or pot—which may be square or round—perforate this block in every part, cover one side of it with a piece of linen cloth, then prepare a linen bag or cloth to place inside the filterer, and put the perforated block inside the bag, with its covered surface uppermost, and placing the bag inside the pot, forcing down the block, which is held above the bottom by the angle of the pot, and then drawing the bag overthe top edges to the outside securing it, you have a very good filterer. Place in it and fill to within an inch or two of the top, ANIMAL CHARCOAL, (bones burnt or charred as wood is to make charcoal, except that these bones are burnt or baked in iron pots, hermetrically closed during the baking,) IN GRAINS; because if in powder, it is not so good for various reasons, and is apt to wash through the filterer. Upon the charcoal in the filterer you pour your juice, at first keeping closed the stop cock or hole (as the case may be,) at the bottom, and retaining the juice in the filterers for a moment, and when opened as it flows from the filterer, you run it into the pan or kettle again to evaporate. You can have as many filterers as you please, all in use at the same time, by having the stop cock of each over a spout which shall conduct the juice to the pan for evaporating.

8th. After filtering, EVAPORATE the juice to twenty-one° and then filter again, and again run it into the kettle in order to

9th. CONDENSE it to the crystalizing point, which is known by taking a small portion between the thumb and finger, after it has been reduced to molasses, and you may suppose it is near the point at which crystallization takes place, and drawing it out, if on cooling, it appears to snap, it must be removed and left to crystallize.

I beg to offer a few remarks here on this point, which my experiments have proved to me. 1st. If you make but a small quantity of sugar, as a pint, a quart, or I should think even a gallon, i. e. two gallons of syrup when it is at the crystallizing point, I should deem it scarcely possible to separate the molasses from the sugar after it has granulated. I am satisfied that it will require a large quantity to carry out all the manipulations as they should be to produce beet sugar with success or profit. No estimate of quantity, expense, or profit can be made from working on a small scale; quality of the beets and sugar may be proved. 2d. After the syrup has been, as supposed, reduced to the crystallizing point, and left in a shallow vessel in a cool place for a day or two, and it is found not to crystallize, provided that it has not been evaporated too much, you may easily make yourself acquainted with the proper point by resort to the following:

Take three or four saucers, and in each place one or two spoonfuls of your syrup, hold each one over a small flame, or a spirit lamp, and reduce each one a shade more than the other and all more than the syrup which you have taken them from, try them as directed and carefully note the appearance of each, and the white spots which arise during the experiment—place them all away for a day, so that on resorting to them, you can designate each and recollect its appearance when you are reducing it; or it would be better to note on a paper relative to each, then if you find any or all of them have granulated, take the one which gives the strongest and best formed crystal for your guide, and reduce your syrup to the same point that you did this sample, and you will scarcely fail to make sugar to the amount of fifty per cent. of your syrup, and the remainder will be molasses. The peculiar odor which most of the syrup and sugar has, I cannot tell how you are to remove; but I have seen sugar made here without it. If the process is carefully and skilfully conducted and the roots good, there will be but little of it. One thing is certain, from constant tasting of the juice and sugar, you become reconciled to this peculiarity, and many who would make it for their own use, would not regard it. Tastes are arbitrary, and can we say that if we had eaten beet sugar all our lives, (without being refined,) with this peculiar odor, we would

not reject cane sugar if presented to us for our use, because of its peculiarity to the taste and smell?

J. S.

(From the Genesee Farmer.)

A SERIES OF EXPERIMENTS,

Together with their results—accompanied with remarks.

1st. In order to ascertain, if practicable, an easy method of cleansing wheat intended for seed, especially of separating oats from spring wheat, brine was made by the solution of salt in water, just strong enough to bear up an egg, and cause a very small part of it to rise and float above the surface of the brine. Into a pail, filled nearly full of brine thus prepared, two or three handfuls of well ripened and plump oats were dropped at different times. None of them sunk—all floated on the surface of the brine, and were taken off with a skimmer. Spring wheat is apt to be infested with oats, and this experiment suggests an easy and sure method of cleansing so much of it as is intended for seed. It may be proper to remark here, that a parcel of oats was dropped into water not impregnated with salt, and that all of them sunk. That there is no danger of injuring the seed, by dropping it into brine strong enough to bear up an egg, will appear from experiments hereafter to be recorded.

2d. A parcel of chess seeds was dropped into the brine used in the above experiment, and many of them sunk. From this it appears, that chess cannot be separated from wheat, as oats may be, by dropping into brine.

3d. Twenty kernels of spring wheat were put into the ground, which had been steeped 15 minutes in brine strong enough to bear up an egg. Eighteen of them came up.

4th. Twenty kernels of the like wheat were put into the ground, which had been steeped 24 hours in brine strong enough to bear up an egg. Seventeen of them came up. Although in these two experiments there was a failure of coming up, in one, of two, and in the other, of three kernels, yet as these two parcels, differing so much as to the time they were in the steep, came up promptly and simultaneously, came up too with thrifty blades, and blades equally so, I can scarcely impute this small failure to the effect of the brine. It is, I think, safe to prepare seed wheat, whatever may be the object, by steeping it at least 24 hours in brine strong enough to bear up an egg. How much stronger the brine might be, and do no harm, or how much longer the steeping process might safely be continued, my experiments do not show. There can be no doubt, that ley, produced by leaching ashes, and made strong enough to bear up an egg, would answer as well as brine for separating oats from spring wheat. Nor can it, I think, be doubted, that, whatever might be the object of steeping, it would be equally safe, as well as equally efficacious, as a steep for seed wheat. Many years since, to prevent smut, I steeped a parcel of seed wheat in a very strong ley, taken from a pot-ashery. This was too strong. It destroyed the vital powers of the seed, produced a failure, and rendered it necessary to sow again.

5th. It being reported that scalding seed peas, by the application of boiling water, would secure the crop from damages by the pea-bug, the object of this experiment, together with the three following, was to ascertain whether boiling water could be applied to peas, without endangering their vital principles. For this purpose, twenty kernels of peas were planted, on which boiling water had been poured and turned off immediately. Nineteen of them came up.

6th. Twenty kernels of peas were planted, on which boiling water had been poured, and been kept on them one minute. Nineteen of them came up.

7th. Twenty kernels of peas were planted, on which boiling water had been poured, and had been kept on them three minutes. Nineteen of them came up.

8th. Twenty kernels of peas were planted in their natural condition, no hot water having been applied to them. The whole twenty came up. It will be seen here, that of the parcel of seeds which had not been scalded, all came up, while in connection with each of the other parcels, there was a failure of one kernel. Be this accounted for as it may, the experiments have shewn to my satisfaction, that boiling water may be applied to peas, and be kept on them at least 3 minutes, without any material detriment to the seed. It should be remarked here, that the several parcels came up simultaneously, and without any perceptible difference as to thriftiness and symptoms of good health. The parcel which had not been scalded, did not appear, in any respect, to have the advantage of the others, except that *all* came up, while, in connection with each of the others, there was a failure of one kernel.

The manner in which these, and all my other hot-water experiments were conducted, was, to put twenty kernels into a large coffee cup, sufficiently large to contain half pint or more, and then fill the cup about half full of boiling water, taken immediately from a kettle hanging over the fire. The heat, I think, must have been as intense, as would be that produced, by pouring two pailfuls of boiling water into a tub containing one bushel of peas, or other grain. In each of my experiments, the seed was planted immediately after the hot water was turned off. If peas are to be scalded for the use of field culture, it will doubtless be prudent to spread them for cooling, as soon as they are separated from the hot water. It may be advisable too to sow them as soon thereafter as practicable, though, if they are readily cooled, as they may be by spreading, I should hardly think it necessary to be in a hurry to sow.

9th. Twenty kernels of corn were planted, on which boiling water had been poured, and turned off immediately. Eighteen of them came up.

10th. Twenty kernels of corn were planted, on which boiling water had been poured, and kept on one minute. Fifteen of them came up.

11th. Twenty kernels of corn were planted in their natural condition, no hot water having been applied to them. The whole of those came up. In regard to these experiments of the corn, I am constrained to remark, that they proved to my satisfaction that hot water is a dangerous thing to be applied to seed corn. For although three-fourths of the parcel which had been kept in hot water the longest, viz. one minute, eventually came up, yet they came up very tardily, not so soon by two or three days, as those which had not been scalded. The blades, when they came up were feeble, and of sickly aspect, differing entirely from those to which no hot water was turned off immediately the same indications were no less real and scarcely perceptible, yet not quite so striking. These too were, in coming up, considerably behind those which had not been scalded, and their blades, when they did come, were manifestly inferior. The results of these experiments were such as to leave no doubt in my mind, that the seed had received an injury from the hot water. Contrary to opinions heretofore entertained by myself, and perhaps by many others, I now believe it dangerous to apply hot water to seed corn. Instead of hastening the progress of its vegetation, as has been supposed, it probably has the contrary effect, besides distempering and debilitating its vital powers. But that it is not so in regard to peas, the experiments above recorded show very satisfactorily. The scalded peas came up as readily, and were as thrifty as those which had not been scalded.

12th. Twenty kernels of fall or winter wheat were put into the ground, on which boiling water had been poured, and kept on one minute. None of them came up—all failed. This single experiment indicates danger in applying hot water to seed wheat. It will not endure the effect of boiling water remaining on it one minute. Scalding seed wheat at all should, I think, be regarded as a dangerous experiment.

13th. Twenty kernels of wheat, as badly blasted, shrunk and shrivelled as I ever saw, were put into the ground. Nearly all of them came up. This experiment proves that badly blasted wheat will answer for seed, or that it will germinate and grow; but it by no means proves that such wheat should be used for seed, except in cases of necessity. It is unquestionably a true doctrine, and a doctrine of universal application that the more perfect the seed the more perfect the progeny may be expected to be. No other than wheat of the first quality should be used for seed, when such can be obtained.

Here ends a series of experiments, the whole of which were commenced and finished by myself, on the twentieth day of September last, only remaining at that time to be longer waited for.

Oct. 27th, 1837. DAN BRADLEY.

[From the Farmers' Cabinet.]

RAISING CHICKENS.

Auburn, Frederick Co. Md. Nov. 23d, 1837.

I very much fear you will begin to think me either an epicure or the son of an epicure, it being only a short time since that I served you up a mess of bacon, and now come with a dish of fowl. It has been said it is not good for man to be alone. Bacon, although good alone, is very much better when accompanied with a good round fat pullet. But it is not a pullet that I am about to serve up to you at present, but her brother, though in an altered form, as you will learn in the sequel. It is a fact known to every traveller, that there is no dish presented before him half so often as that of chicken, served up in every form of which it is capable, broiled, fried, stewed, baked, or boiled, and it is a fact equally well known that there is no dish so often turned away untasted, in consequence of its disgusting appearance of bad culinary preparations. I al-

lude of course to such as we too frequently meet with on our public tables and watering places, (Bedford itself not excepted.) How often is the ears of the hungry and weary traveller assailed the moment the stage draws up to the inn, by the dying shrieks of the rooster that had but the moment before been picking a scanty subsistence from the dunghill, and in a few moments more graces the head of the table, looking more like that well known waterfowl vulgarly called a fly-up-the-creek, who is indebted alone to the length of his legs and neck for a subsistence, than what it really is. But I have promised to give you something even better than a fat pullet, and I shall now proceed to serve it up; I mean then that favorite dish of the ancient Romans, the "Gallus Spads or Capon," or more plainly the cock altered by castration, and in such high repute was it, that it generally graced the board of that most excellent judge of good eating, Lucullus, and if Shakspeare is to be believed, it was a tit bit not only with Jack Falstaff, but with the Justice who is represented—"In fair round body with good capon lin'd." In England, at the present day, at every respectable eating house, the first thing that greets the eye of the traveller and heads the bill of fare, is a capon, either boiled or baked. In France they are made doubly useful, not only as an article of food, but a means of production; if I may be allowed the expression they are used as a foster mother for raising chickens, which they do much better than the hen, owing to the large size and thick coat of feathers. The poulterers use a considerable number of them for this purpose,—the moment the hen has hatched her brood they are given to the capon, who rears them with all the care of the mother, the hen is cooped and fed until she gains her flesh and strength, and then turned out to lay and set again; in this way the poulterer is enabled to raise a large number of chickens from half the number of hens. The capon at market sells higher than any of our domestic fowls. What is the reason then in our country where good living is so highly prized, the capon is seldom or never seen?—should you travel from Maine to New Orleans, you would probably never have this question put to you at table, "Sir, shall I help you to a fine piece of capon." I would by no means attribute this neglect of one of the finest dishes in the world to obtuseness of palate, but rather to a want of the necessary information as to the manner of performing the operation on the cock. To obviate this I will subjoin directions, by the observance of which a man of common adroitness can make two dozen capons in an hour. Lay the chicken before you on his left side, with his head towards your right hand, let an assistant hold him by his head and legs extended; with a sharp knife make a transverse incision of one and a half inches or more in the side just below the ribs. Insert the fore finger, and near the middle of the body, at the distance of about three quarters of an inch from the incision, near the spine, will be found the testicles, which may very easily be removed by the thumb and finger; sew up the orifice and daub a little tar over it to keep off the flies. Care should be taken in cutting through the several integuments lest the viscera be wounded. The cock should be about half grown. Not one in a hundred will die if the operation be properly performed. After a fair trial both of the bacon and capon, should you relish them, I may be induced at some future time to serve you up some other dish, which I only hope may be found as agreeable to your numerous readers as was the long and learned dissertation we had some time since upon Hollow Horns.

With my best wishes,
I am respectfully your ob't. serv't.
J. W. J.

MANGEL WURTZEL.

To the editor of the Friend—

Knowing thy interest in agricultural affairs, and thinking many readers of the "The Friend" would feel a similar interest in the very interesting particulars detailed in the accompanying statement; I send thee the following relation of them, drawn up at my request by the friend himself, and of the accuracy of which there can be no doubt. I think the produce of the cow beet so great and so well adapted to feeding cattle, particularly on small farms, that I am desirous of giving a wider circulation to the accompanying particulars in order to induce our country friends to give them further trials. C. W.

Particulars relative to a crop of beets, (Mangel Wurtzel,) raised in the season of 1837, on the farm of Isaac C. Jones, called Rockland, on the banks of the river Schuylkill, in the neighbourhood of the city of Philadelphia, viz:

Nett measure of the ground on which they stood was 67 square poles. Add for the headland or turning ground, 4 do. Total, 71 square poles, being nine less than half an acre.

The produce on the above mentioned ground, excluding the leaves, and confining it entirely to the roots, amounted to four hundred and thirty bushel, agreeably to the measurement of Joseph Berry, the farmer who attended to their culture for the said Isaac C. Jones throughout the season. On weighing a portion of these beets, it was ascertained they would average fifty-five pounds per bushels, making an aggregate of twenty-three thousand six hundred and fifty pounds, or a little over ten and a half tons (of 2250 pounds each,) being at the rate of twenty-three and two-third tons to the acre, or nine hundred and sixty-nine bushels.

Many of the above mentioned beets weighed from seven to thirteen pounds. One that was particularly measured and weighed, produced the following result, viz: Twenty-seven inches in circumference, and weighed thirteen and a half pounds.

The produce would have been considerably increased had not many of the seed proved defective, and the plan of transplanting resorted to; but the latter, if well done, answers an excellent purpose.

The above mentioned ground was accurately measured by said Joseph Berry, and the subscriber, this 11th month, 8th, 1837.

ISAAC C. JONES.

Egyptian Cotton.—The Macon Messenger of the 30th ultimo, speaking of a sample of this cotton left at that office, raised from the seed received from our representative in Congress, Col. W. C. Dawson, says—"The staple is very fine and long, almost equalling the sea island cotton, and we are told the plants are very productive of bolls—the quantity of cotton in each is not considered equal to that of our common kinds, but from the large number, the amount is very great. From twenty-one stalks he had gathered 15lbs. cotton, and believed by the end of the season they would exceed a pound each. At this time there were remaining as many as one hundred bolls to the stalk, most of which would mature. The staple has a slight tinge of yellow, and it is very beautiful. Should it continue as productive as it is at present, it will be a valuable acquisition to our planters."

MARYLAND AGRICULTURAL REPOSITORY.

Robert Sinclair, jr. & Co.

Light near Pratt street Wharf, offers for sale,

Cylindrical Straw Cutter, adapted to horse or manual power. These boxes are so constructed as to be capable of cutting cornstalks and fodder, tangled hay, &c. with great despatch; Thus enabling the farmer to realize a profit by feeding to his cattle his corn-stalks, which would otherwise in a great measure be lost. As regards quality and effect, these machines now stand A No. 1, no cutting machine having been introduced to the public equal in power.

The Size and Price are as follows, viz,

11 inch Boxes, $30, extra Knives for do. per sett $4,
14 " " $45, " " " 5,
20 " " $75, " " " 8,

CORN SHELLERS—hand machines $20, horse do. 40. 1500 PLOUGHS, of various sizes and patterns, among which are the Southern Flushing and Cultivating Ploughs; also Side Hill Ploughs, Double Mould Board Ploughs, &c. Prices 4, 6, a $15 each.

CULTIVATORS for Corn, Cotton and Tobacco. Prices from 5 a 6 50 each.

Cotton Gins, made to order at 50 a $150, each.

Drill and Sowing Machines at 6,20 a $100 each.

Farming and Harvest Tools of every description, Fancy and Common Garden Tools, Ox Yokes and Bows, Grubbing Hoes, Briar Hooks, Caststeel Axes' &c.

SEED DEPARTMENT.

In this department is constantly kept for sale, Seed Grain and other Field Seeds, Seed Potatoes, and an extensive assortment of Garden Seeds, selected from the most respectable European Seed marts and from our Seed Gardens near this city.

TREES AND PLANTS.

Supplied from R. Sinclair, Senr's extensive Nurseries n the vicinity of this city, where Trees of good size can be procured and warranted to produce as represented.

☞ Orders from persons residing at a distance will be promptly and carefully attended to when the cash is remitted by letter or satisfactory reference furnished.

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BALTIMORE PRODUCE MARKET.

☞ *These Prices are carefully corrected every* MONDAY

	PER	FROM	TO
BEANS, white field,	bushel.	1 25	—
CATTLE, on the hoof,	100lbs	6 00	7 00
CORN, yellow	bushel	76	78
White	"	75	78
COTTON, Virginia,	pound	11	—
North Carolina,	"	—	—
Upland,	"	10	2
Louisiana —— Alabama	"	—	—
FEATHERS,	pound.	50	—
FLAXSEED,	bushel.	1 37	1 50
FLOUR & MEAL—Best wh. wh't fam.	barrel.	11 00	12 00
Do. do. baker's	"	—	—
Super How. st. from stores	"	9 25	9 50
" " wagon price,	"	9 00	—
City Mills, super	"	9 25	9 50
" extra	"	9 75	—
Susquehanna,	"	—	—
Rye,	"	6 50	—
Kiln-dried Meal, in hhds.	hhd.	23 50	24 00
do. in bbls.	bbl.	5 00	5 25
GRASS SEEDS, wholes. red Clover,	bushel.	5 50	6 00
Kentucky blue	"	2 50	3 00
Timothy (herds of the north)	"	3 50	4 00
Orchard,	"	2 50	3 00
Tall meadow Oat,	"	—	3 00
Herds, or red top,	"	1 00	1 25
HAY, in bulk,	ton.	12 00	15 00
HEMP, country, dew rotted,	pound.	6	7
" water rotted,	"	7	8
HOGS, on the hoof,	100lb.	6 25	6 50
Slaughtered,	"	—	—
HOPS—first sort,	pound.	9	—
second,	"	7	—
refuse,	"	5	—
LIME,	bushel.	32	35
MUSTARD SEED, Domestic, —; blk.	"	3 50	4 00
OATS,	"	37	38
PEAS, red eye,	bushel.	—	—
Black eye,	"	75	1 00
Lady,	"	1 00	—
PLASTER PARIS, in the stone, cargo,	ton.	—	3 50
Ground,	barrel.	1 62	—
PALMA CHRISTA BEAN,	bushel.	—	—
RAGS,	pound.	3	4
RYE,	bushel.	90	—
Susquehannah,	"	—	none
TOBACCO, crop, common,	100 lbs	2 50	3 50
" brown and red,	"	4 00	6 00
" fine red,	"	8 00	10 00
" wrappery, suitable for segars,	"	10 00	20 00
" yellow and red,	"	8 00	10 00
" good yellow,	"	8 00	12 00
" fine yellow,	"	12 00	16 00
Seconds, as in quality,	"	—	—
" ground leaf,	"	—	—
Virginia,	"	4 50	9 00
Rappahannock,	"	—	—
Kentucky,	"	4 00	8 00
WHEAT, white,	bushel.	2 00	2 10
Red, best	"	1 85	1 95
Maryland inferior	"	1 68	1 85
WHISKEY, 1st pf. in bbls. (cash)	gallon.	43	44
" in hhds. (cash)	"	42	42½
" wagon price, (7)	"	bbls	39
WAGON FREIGHTS, to Pittsburgh,	100 lbs	1 50	— —
To Wheeling,	"	1 75	—
		washed.	unwash
WOOL, Prime & Saxon Fleeces,	pound.	40 to 50	20 22
Full Merino,	"	35 40	18 20
Three fourths Merino,	"	30 35	18 20
One half do.	"	25 30	18 20
Common & one fourth Meri.	"	25 30	18 20
Pulled,	"	28 30	18 20

MORUS MULTICAULIS TREES.

The subscriber has from 25,000, to 30,000 Morus Multicaulis trees now growing at his residence, with roots of 1, 2, and 3 years old, which will be ready for sale this fall, and which he will sell on moderate terms.

EDWARD P. ROBERTS.

Baltimore Md.

BALTIMORE PROVISION MARKET.

	PER.	FROM.	TO.
APPLES,	barrel.	—	—
BACON. hams, new, Balt. cured	pound.	13	13
Shoulders, do	"	10½	10½
Middlings, do	"	do	do½
Assorted, country,	"	9	9½
BUTTER, printed, in lbs. & half lbs.	"	20	25
Roll,	"	—	—
CIDER,	barrel.	—	—
CALVES, three to six weeks old	each.	5 00	6 00
COWS, new milch,	"	25 00	40 00
Dry,	"	9 00	12 00
CORN MEAL, for family use,	100lbs.	1 87½	—
CHOP RYE,	"	—	1 75
EGGS,	dozen.	18	—
FISH, Shad, No. 1, Susquehanna,	barrel.	6 75	—
No. 2,	"	6 50	—
Herrings, salted, No. 1,	"	2 75	2 87
Mackerel, No. 1, —— No. 2	"	9 00	10 00
No. 3,	"	4 75	—
Cod, salted,	cwt.	3 00	3 25
LARD,	pound.	9	10

BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

U. S. Bank,	par	VIRGINIA.	
Branch at Baltimore,	do	Farmers Bank of Virgi.	1½a1½
Other Branches,	do	Bank of Virginia,	do
MARYLAND.		Branch at Fredericksburg.	do
Banks in Baltimore,	par	Petersburg,	½
Hagerstown,	½a	Norfolk,	1½a1½
Frederick,	do	Winchester,	½
Westminster,	do	Lynchburg,	1½a1½
Farmers' Bank of Mary'd,	do	Danville,	½o
Do. payable at Easton,	1	Bank of the Valley,	½
Salisbury, 2 per ct. dis.		Branch at Romney,	do
Cumberland,	3	Do. Charlestown,	do
Millington,	do	Do. Leesburg,	1½
DISTRICT.		Wheeling Banks,	3a3½
Washington, Georgetown, Alexandria, Banks,	½p.c.	Ohio Banks, generally	6a7
PENNSYLVANIA.		New Jersey Banks gen.	5
Philadelphia,	½a	New York City,	½
Chambersburg,	1	New York State,	3a4
Gettysburg	do	Massachusetts,	3a3½
Pittsburg,	3½	Connecticut,	3a3½
York,	1	New Hampshire,	3a3½
Other Pennsylvania Bks.	4	Maine,	3a3½
Delaware [under $5]	6	Rhode Island,	3a3½
Do. [over 5]	2	North Carolina,	5
Michigan Banks,	10	South Carolina,	8a10
Canadian do.	10	Georgia,	do
		New Orleans	12

THE GENUINE MORUS MULTICAULIS, AND GRAPE VINES.

The undersigned having a disposable stock of the genuine Morus Multicaulis, will sell at the following prices—For rooted plants, as of layers one foot and upwards high, to trees of 8 and 9 feet, from 10 to 30 dollars per hundred; and the cuttings from 10 to 40 dollars per thousand, as they may have 1, 2, 3 or 4 buds each, or at the rate of one cent a bud, in cuttings or limbs uncut, as may suit purchasers. The above stock of some hundred trees and several thousand cuttings, together with a large number of rooted Grape Vines at 20 dollars per hundred of kinds most select for American culture, to be engaged according to priority of application, made to the subscriber (if by letter) as postmaster at Brinkleyville, Halifax Co. N. Carolina.

SYDNEY WELLER.

Nov. 9, 1837—21 3t

A DURHAM BULL FOR SALE.

UNCAS, a beautiful white Bull of the improved Durham short-horn breed, 3 years old, will be sold a bargain, $250, as his owner, desirous of changing his cross, bought another bull at the sale of Mr. Whittaker's stock. Uncas has a pedigree tracing to the herd-book, and will be warranted pure.

☞ Applications by letter to be post-paid. Address

s 29 EDWD. P. ROBERTS, Baltimore, Md.

FARMERS' REPOSITORY,

PRATT STREET,

Between Charles & Hanover sts. Baltimore, Md.

During the last four years the Proprietor has erected two extensive Establishments for the manufacture of Agricultural Implements generally, including an extensive Iron Foundry, Trip Hammer, &c. With these facilities, and the most experienced workmen, (many of whom have been several years in his employ,) and the best materials, he flatters himself that he will continue to give general satisfaction to his customers, his object is to confine himself to useful implements, and to have them made in the best possible manner and on reasonable terms.

The following are some of the leading articles now on hand, viz. his own Patented Cylindrical Straw Cutters, of various sizes and prices—these machines have never been equalled by a similar machine in any part of the world.

Corn and Tobacco Cultivators
Superior Grain Cradles
Weldron Grain and Grass Scythes
Farwell's Patent Double Back Grass Scythes and Snathes
Hay Forks and Rakes
Manure Forks, Shovels, &c.
English Corn Hoes
Superior American made Casteel Hoes, with handles
Wheat FANS, of various sizes
Mattocks, Picks and Grubbing Hoes
Corn Shellers
Threshing Machines, with or without horse power
F. H. Smith's Patent Lime Spreaders
A great variety of Ploughs of all sizes, with wrought and cast iron Shares
Swingle Trees and Hames
Also, a great variety of Plough Castings, constantly on hand for sale by the piece or ton. All kinds of Machine Castings made to order; repairs on Ploughs and Machinery done at short notice
Liberal discount made to those who purchase to sell again.

All kinds of Grass SEEDS and Seed Grain bought and sold by him, and particular attention paid to their quality.

Likewise constantly on hand a general assortment of Mr. D. Landreth's superior GARDEN SEEDS, raised by himself, and warranted genuine. All communications by mail, post paid, will receive prompt attention.

jy 4 J. S. EASTMAN.

MULBERRY TREES.

75,000 Chinese Morus Multicaulis, all on their own bottoms, of various sizes, from one to six feet, at the lowest prices. The wood is well matured and very perfect, and they have become acclimated, by successive propagation in a most exposed location—Prepared Cuttings will be supplied at the lowest rates.

3,000 hybrid short jointed Mulberry, with large leaves, very hardy and on their own bottoms—5 to 6 ft. in height.

20,000 Chinese Morus expanse, with large smooth glossy leaves, very succulent and nutricious, and greatly loved by the worm. This is a most valuable variety for the North, being very hardy, and none more highly esteemed in France. They are engrafted on the white mulberry, which increases their hardihood, and are 5 to 7 feet in height—This is the only engrafted kind.

3,000 Dandolo or Mozettiana Mulberry, 1 and 2 years old from seed, a most excellent variety, with large leaves and very hardy

10,000 Brusa Mulberry, very hardy

25,000 Florence Mulberry, leaves nearly entire

30,000 white Mulberry, 1 to 2 years old

65 lbs. white Italian Mulberry Seed

750 lbs. white and yellow Sugar Beet Seed

☞ Priced catalogues of the above, and of Fruit and Ornamental Trees, Green House plants, Bulbous Flower Roots, splendid Dahlias, and Garden, Agricultural and Flower Seeds, sent gratis to every applicant. Orders sent per mail will meet prompt attention, and the trees be packed carefully and forwarded as desired. Companies or individuals desirous to contract for large numbers of trees will be dealt with on the most liberal terms.

WM. PRINCE & SON.

New York, Nov. 22—28. 4

☞ *The office of the "Farmer and Gardener" is removed to the cor. Baltimore & North sts.*